Benchmarking Across Regional Collaboratives: The IMPROVE Network Experience

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Objectives

- Limitations in current efforts to assess clinical practice
- Early experience from the IMPROVE Network
Annual Yearly Decline in CABG Mortality Risk From ’87 – ‘92

Adjusted ’92 CABG Medicare Mortality Rate

- Low Improvement
  - High Mortality: MS
  - Low Mortality: VA

High Improvement
  - High Mortality: NE
  - Low Mortality: NNE

Shared data to drive quality improvement
Since the beginning of the CABG quality improvement effort, there were 2,589 deaths expected and 1,310 deaths observed. 1,279 fewer deaths occurred than were predicted.

Active engagement of frontline clinical care providers
Benefits of Participation:

- Helps improve patient outcomes;
- Identifies initiatives and new areas for quality improvement;
- Documents the quality of care delivered by your practice;
- Enables risk modeling of major procedures;
- Offers access to data for assessment of new technology and techniques;
- Provides the option to publicly report your CABG and AVR composite star ratings; and

The STS National Database has three components, each focusing on a different area of cardiothoracic surgery—Adult Cardiac Surgery, Congenital Heart Surgery, and General Thoracic Surgery—and all of which offer international participation.
• Helps improve patient outcomes;
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• Documents the quality of care delivered by your practice;
• Enables risk modeling of major procedures;
• Offers access to data for assessment of new technology and techniques;

Helps improve patient outcomes
Identifies initiatives and new areas for quality improvement

Commit to improving your practice through the STS National Database.

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Certification Part 1A—Evaluation of Performance in Practice.

Participation:
outcomes;
new areas for
of care delivered by
of major procedures;
or assessment of
techinques;
publicly report your
Quality Collaboratives

• Missions focus on providing exemplary care for patients in regions
• Leverage ability to act as communities to discuss data and ways of improving care
• Individually, each has had number of successes
Michigan Society of Thoracic & Cardiovascular Surgeons
Quality Collaborative

A multidisciplinary group of medical professionals
dedicated to improving the care of adult cardiac surgery patients in Michigan

NEW BRUNSWICK HEART CENTRE
CENTRE CARDIAQUE DU NOUVEAU BRUNSWICK

Horizon
HEALTH NETWORK

The Northern New England
Cardiovascular Disease Study Group

VCSQI Membership Map

Legend:
Hospital Member
Physician Member

Winchester
Fairfax
Falls Church
Norfolk
Richmond
Portsmouth
Newport News
Roanoke
Randolph
Lynchburg
Salem
Alexandria
Fredericksburg
Charlottesville
Lynchburg
Salem
Roanoke
Richmond
Newport News
Portsmouth
Virginia Beach
Each region has its own set of benchmarking reports – Benchmark is relative to your region.

Currently in the US, there is no system in place to facilitate broader benchmarking other than STS report.
Perspective

“Sometimes the only reason for us to be somewhere else is to see things from a different perspective”

Leila Summers
Learning from Each Other

• Opportunity has not existed to learn systematically from each other
  "what’s the recipe"

• As consequence, missed opportunities to improve the quality and value of care
AHRQ Network Grant
1R13HS020562-01

• Leverage each collaborative’s strengths and areas of traditional focus
• To assess the degree and depth of variability in practice and outcomes
  Across medical centers irrespective of the collaborative they function within
• Identify best practices, and
• Design interventions to implement best practices across IMPROVE Network sites
• Set of principles to guide our work
• Share identifiable data to facilitate benchmarking
• Meet for 3 hours prior to STS meeting, and then go to dinner together
  – Last meeting included perfusion representatives from NNE, MSTCVS, VA, MA

http://www.improvenetwork.org
To improve the value of cardiovascular surgical care by developing, sharing best practice knowledge, coordinating, undertaking, evaluating and disseminating quality improvement projects across our member organizations.

http://www.improvenetwork.org
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>3:00</td>
<td>Welcome &amp; Introductions</td>
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<tr>
<td>3:15</td>
<td>Update on activities across each collaborative</td>
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<tr>
<td>3:45</td>
<td>QA Report across collaboratives</td>
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<td>4:45</td>
<td>BREAK</td>
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<td>5:00</td>
<td>Future projects</td>
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<td></td>
<td>• PCI&amp;CABG transfusion</td>
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<td></td>
<td>• Understanding decision-making for intra-operative transfusions</td>
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<td>5:45</td>
<td>Harvest Process</td>
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<tr>
<td>6:00</td>
<td>Wrap-up</td>
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List of Current IMPROVE Members

- The Clinical Outcomes Assessment Program,
- Maritime Cardiovascular Quality Initiative,
- Michigan Society of Thoracic and Cardiovascular Surgeons,
- Northern New England Cardiovascular Disease Study Group, and
- Providence Health & Services Cardiovascular Disease Study Group.
Opportunity

- Identify best in class performance across our regions
- Leverage our distinct talents to approach problems in more robust fashion
- Use shared strengths in implementation science to adopt best practices
- Use registry data to reflect if changes yield improved outcomes
- Share new knowledge with our broader colleagues
“Action is the real measure of intelligence.”
- Napoleon Hill

measurement without action is a waste of effort
- RBC transfusions of 1 or 2 units occurred among 25.2% of CABG procedures
- Significant variation in the number of RBC units used existed across regions
- Variation in overall transfusion rates remained after adjustment (9.1% - 31.7%)
In Summary

• Benchmarking is an important strategy for driving QI

• The IMPROVE Network leverages the strengths inherent across regionally-based collaboratives